ISSUED

WP 05-WH1207

Revision 10

SLB2 Handler 52-H-035B

Technical Procedure

EFFECTIVE DATE: 08/15/19

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APPROVED FOR USE

THIS DOCUMENT IMPLEMENTS KE 7-5 AND REQUIREMENTS FOR THE HWFP.

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CHANGE HISTORY SUMMARY

REVISION NUMBER	DATE ISSUED	DESCRIPTION OF CHANGES
9	07/31/18	DSA Rev. 6A: • Updated JHA reference. • Updated LCO 3.3.8 and SAC 5.5.1 in Precautions and Limitations. • Added references to SAC 5.5.1, LCO 3.1.2, and SR 4.1.2.1 to Step 5.1.3. • Added SAC 5.5.1 to Attachment 1 title. • Removed SAC 5.5.1 from individual steps.
10	08/15/19	• Removed references to handler no. 52-H-035A. DSA Rev 6a Page Change 002a: • Updated step to remove SAC 5.5.8 and replace it with KE 7-5.

1.0 INTRODUCTION

This procedure provides the required instructions for inspecting the SLB2 Handler (52-H-035B) at the WIPP.

This procedure meets the SR 4.1.2.1 of LCO 3.1.2 and SAC 5.5.1.

Performance of this procedure, or selected sections of the procedure, implements inspection requirements of the HWFP relative to the scope of, and as defined in, this document.

Performance of this procedure generates the following record(s). Records generated are handled in accordance with departmental Records Inventory and Disposition Schedules.

- Equipment Logbook
- EA04AD3001-SR10, LCO Surveillance Data Sheet (Waste Handling Mode Only)

2.0 REFERENCES

DOCUMENT NUMBER AND TITLE	BASELINE DOCUMENT	REFERENCED DOCUMENT	KEY STEP
40 CFR 264.15, General Inspection Requirements	✓		
30 CFR 56, Safety and Health Standards – Surface Metal and Nonmetal Mines	✓		
30 CFR 57, Safety and Health Standards – Underground Metal and Nonmetal Mines	✓		
30 CFR 58, Health Standards for Metal and Nonmetal Mines	✓		
Hazardous Waste Facility Permit, EPA Identification No. NM4890139088-TSDF	✓		**($)**
DOE-STD-1090-2007, Hoisting and Rigging	✓		
DOE/WIPP-07-3372, Waste Isolation Pilot Plant Documented Safety Analysis	✓		
DOE/WIPP-07-3373, Waste Isolation Pilot Plant Technical Safety Requirements	✓		**($)**
Hoist Forklift Operator's and Owner's Manual	✓		
WP 04-AD3001, Facility Mode Compliance		✓	
WP 04-AD3016, Equipment Out of Service Process		✓	
WP 05-WH1810, Underground Transuranic Mixed Waste Disposal Area Inspections		✓	

DOCUMENT NUMBER AND TITLE	BASELINE DOCUMENT	REFERENCED DOCUMENT	KEY STEP
WP 13-1, Nuclear Waste Partnership LLC Quality Assurance Program Description	✓		
WP 15-GM1002, Issues Management Processing of WIPP Forms		✓	
EA04AD3001-SR10, Surveillance Data Sheet		✓	
05-WH1207-JHA, Preoperational Checks for SLB2 Handler	✓		

2.1 ABBREVIATIONS AND ACRONYMS

AR	Action Request
CAM	continuous air monitor
CMRO	Central Monitoring Room Operator
FPE	Fire Protection Engineer
FSM	Facility Shift Manager
HWFP	Hazardous Waste Facility Permit
IVS	Interim Ventilation System
LCO	Limiting Conditions of Operations
SAC	Specific Administrative Controls
SEC	Site Environment Compliance
SLB2	Standard Large Box 2
SR	Surveillance Requirements
TSR	Technical Safety Requirements
U/G	underground
UVFS	Underground Ventilation Filtration System
WHE	Waste Handling Engineer
WHM	Waste Handling Manager

3.0 PRECAUTIONS AND LIMITATIONS

3.1 The TSRs contain LCOs and SACs which provide specific preventive or mitigative limits and required actions for identified accident scenarios. Failure to comply with LCOs or SACs may constitute a violation and must be immediately reported to the CMRO. The step affected by the LCO/SAC is denoted with the **TSR** designator in the margin, a **($)** at the beginning of the step and is followed by the LCO/SAC number in bold brackets (e.g. **[LCO 3.X.X]**). Applicable LCO/SAC Surveillance Data Sheets SHALL be completed as required by WP 04-AD3001, Facility Mode Compliance.

3.2 Vehicles/equipment SHALL be controlled as follows: **[LCO 3.3.8]**

Liquid-fueled vehicles/equipment:

- ATTENDED in the WASTE SHAFT STATION when CH WASTE is present in the WASTE SHAFT STATION.
- ATTENDED in the TRANSPORT PATH when CH WASTE is present in the TRANSPORT PATH.
- ATTENDED when within 25 feet from a CH WASTE FACE.
- Limited to no more than two liquid-fueled vehicles/equipment within 25 feet of a CH WASTE FACE.

3.3 The FSS on UNDERGROUND vehicles/equipment selected for use SHALL be OPERABLE. **[LCO 3.1.2]**

3.4 An OPERABLE FSS consists of the following elements:

- Control Panel with functional status indicating light(s)
- Temperature detection elements
- Adequately charged suppressant system
- Distribution system to disperse the suppressant
- Automatic engine cutoff capability

3.5 The UVFS/IVS SHALL be OPERABLE. **[LCO 3.2.3]**

3.6 Preoperational checks are required prior to first operation of a SLB2 Handler on each shift. **[HWFP Table E-1]**

3.7 Exceeding the following load-carrying capacities of 52-H-035B forklift can cause personal injuries or equipment damage:

- 36,000 lbs at 24 inch load center

3.8 Pre-operational Checks of Vehicles/Equipment in Proximity to CH WASTE, PRIOR TO USE, Vehicle(s)/Equipment to be operated within 25 feet of a CH WASTE FACE, in the TRANSPORT PATH when CH WASTE is present in the TRANSPORT PATH, or in the WASTE SHAFT STATION when CH WASTE is present in the WASTE SHAFT STATION, SHALL be inspected for the following attributes: **[SAC 5.5.1]**

- Brake operation, as applicable
- Steering, as applicable
- No excessive leaks
- Operating lights and horn, as applicable
- Fluid levels are within operating range, as applicable, and
- Cleanliness

3.9 When the ACTIVE PANEL, including the exhaust drift, is occupied, at least one CAM communicating with the CMR is required in the exhaust drift of the active Disposal Panel. Portable air samplers or portable CAMs are used when the CAM communication with the CMR becomes inoperable. The temporary use of portable devices and the return to service of CMR communication are managed under the Radiation Protection Program. (KE 7-5)

3.10 Equipment horn must be sounded whenever:

- Starting or moving equipment
- Approaching an intersection
- Encountering an area of limited visibility
- Approaching pedestrian(s)

3.11 Operator must be aware of overhead obstacles at all times when forklift is in operation.

3.12 To prevent personnel injury hands, feet, and other body parts must remain inside forklift operator's cab at all times.

3.13 Carrying passengers is prohibited.

3.14 During load movements that impair the forklift operator's view, a spotter shall be utilized.

3.15 Airlock doors must be FULLY OPEN prior to entering/exiting with mobile equipment.

3.16 Mobile equipment must be in the center of an airlock prior to opening/closing.

3.17 A Spotter is required when handling waste or when diesel-powered vehicles are operating within 100 ft of waste face.

3.18 In the U/G, no waste shall be moved to a location outside the designated disposal path.

3.19 If a hazard not previously recognized is found, work shall be stopped and WHE notified.

3.20 Ear plugs are needed for diesel powered forklift operation.

4.0 PREREQUISITE ACTIONS

4.1 **VERIFY** U/G ventilation is aligned to allow forklift operation.

5.0 PERFORMANCE

5.1 PREOPERATIONAL CHECKS

5.1.1 **REVIEW** Equipment Logbook for outstanding deficiencies and ARs.

5.1.2 **IF** a required inspection becomes delinquent, or has failed, **THEN**:

[A] Immediately **NOTIFY** the on-call SEC Representative and the CMRO of the delinquent or failed inspection.

[B] **SCHEDULE** and **COMPLETE** the required inspection.

[C] **DOCUMENT** the following and **SUBMIT** to the SEC manager within 5 working days:

- Schedule for inspection.
- Reasons why the inspection was not performed.
- Any compensatory measures taken to offset negative impacts resulting from not performing the inspection.
- Actions to prevent further delinquencies.

[D] WHE, **GO TO** WP 15-GM1002, Issues Management Processing of WIPP Forms, and **ENSURE** a WIPP form is generated.

NOTE

Correcting deficiencies when discovered may be considered a satisfactory check.

TSR

5.1.3 **($)** WH, **COMPLETE** Attachment 1, SLB2 Handler Preoperational Checks. **[HWFP Table E-1] [SAC 5.5.1] [LCO 3.1.2] [SR 4.1.2.1]**

5.1.4 **RECORD** the following in Equipment Logbook:

- Deficiencies found
- Hour Meter
- Procedure Number
- Check SAT and/or Problems Noted.
- Addition of any fluids including amount added.
- Corrective actions taken (i.e., outstanding/newly generated ARs).
- Enter date, time, and signature to document performance of preoperational check.

5.1.5 **IF** any of pre-operational checks are Unsatisfactory,
THEN

[A] **DOCUMENT** unsatisfactory condition in Equipment Logbook.

[1] **IF** vehicle is leaking,
THEN GO TO Attachment 2, Leak Categorization, to categorize leak and **RETURN** to 5.1.5[A][2].

[2] **RECORD** leak category in Equipment Logbook and take action or contact FPE in accordance with Attachment 2.

[B] **NOTIFY** WHE or WHM of any deficiencies
AND OBTAIN approval prior to use.

5.1.6 **COMPLETE** EA04AD3001-SR10, LCO Surveillance Data Sheet, for LCO 3.1.2, SR 4.1.2.1, as found in WP 04-AD3001, Facility Mode Compliance (Waste Handling Mode Only).

5.1.7 **PROVIDE** completed EA04AD3001-SR10 and all associated documentation to FSM for review and approval (if applicable).

5.1.8 **IF** in Waste Handling Mode,
THEN GO TO WP 05-WH1810, Underground Transuranic Mixed Waste Disposal Area Inspections, and **DOCUMENT** 13-Ton SLB2 Handler in Preoperational Waste Handling Mode Checklist.

HWFP ($) Attachment 1 - SLB2 Handler Preoperational Checks [HWFP Table E-1] [SAC 5.5.1]

NOTE

1. Deficiencies that are corrected when discovered may be considered a satisfactory check.
2. Activities in this Checklist may be performed in any order.
3. If forklift is being used beyond 200 feet from the CH Waste Face and the Fire Suppression System is inoperable, a fire watch must be present during operation.

	INSPECTION	CRITERIA	SAT	NA	UNSAT
1	General Condition Checks	No excessive leaks (i.e., battery compartment, hydraulic lines, fuel lines) as indicated by visible flow of fluid under pressure, puddles beneath equipment, or abnormal loss of hydraulic fluid.	☐	☐	☐
		Acceptable cleanliness (minimal accumulation of oils/greases [oil sheen/dampness/droplets]).	☐	☐	☐
		No damage	☐	☐	☐
		Area around equipment is clear of obstacles	☐	☐	☐
		No Deterioration	☐	☐	☐
2	Battery Compartment	Free of acid spills/leaks.	☐	☐	☐
		No loose or missing caps or cables.	☐	☐	☐
3	Fire Suppression	Fire extinguisher inspection is up to date and charged.	☐	☐	☐
		($) Fire suppression system electronic display panel green status LED is illuminated. **[LCO 3.1.2] [SR 4.1.2.1]**	☐	☐	☐
		($) Visually VERIFY that automatic/manual fire suppression system has not discharged. **[LCO 3.1.2]**	☐	☐	☐
		($) PUSH test button on fire suppression panel **AND VERIFY** engine turns OFF. **[LCO 3.1.2]**	☐	☐	☐

HWFP ($) Attachment 1 - SLB2 Handler Preoperational Checks [HWFP Table E-1] [SAC 5.5.1]

	INSPECTION	CRITERIA	SAT	NA	UNSAT
4	Operator's Compartment	Seat belt in good condition	☐	☐	☐
		Steering operates smoothly	☐	☐	☐
		Backup alarm sounds when in reverse	☐	☐	☐
		All gauge indications on MD3 display show within their normal range.	☐	☐	☐
		Horn sounds when actuated.	☐	☐	☐
		All fault/warning lights are OFF.	☐	☐	☐
		Front and back lights illuminate.	☐	☐	☐
5	Engine Condition	Hydraulic oil level is within operating range.	☐	☐	☐
		Engine oil level is within proper range on dipstick.	☐	☐	☐
		Power steering fluid level (cold) between full and add marks	☐	☐	☐
		Engine coolant is within proper range.	☐	☐	☐
		Belts not loose, worn, or cracked	☐	☐	☐
		Windshield washer fluid level visible in reservoir, if installed	☐	☐	☐
		Air filter indicator is in yellow zone	☐	☐	☐
		Transmission oil is within proper range on dipstick.	☐	☐	☐
6	Tires, Brakes	Tires not excessively worn or cracked.	☐	☐	☐
		Wheel lugs installed and tightened per torque indicators.	☐	☐	☐
		Parking brake releases and sets; equipment does not move when attempting to do so with brake set.	☐	☐	☐
		Brake pedal is not springy or spongy and does not stick or bind when pressed.	☐	☐	☐
		Demonstrate brake operation by driving vehicle/equipment and bringing vehicle/equipment to stop with braking system.	☐	☐	☐
7	Forks, Upright and Lift Chains	Fork controls operate normally.	☐	☐	☐
		Forklift directional controls operate normally.	☐	☐	☐
		Upright and lift chains: no obvious wear, damage, or missing parts, no slack or broken chains	☐	☐	☐
		Forks: no obvious cracks, bends, breaks, twists, or wear, correctly installed	☐	☐	☐

Attachment 2 - Leak Categorization

Indications:	TYPE 0	TYPE 1	TYPE 2	TYPE 3	TYPE 4
	No indications of moisture – dry	Dampness around hoses or engine compartments, including oil sheen.	Dripping from a hose	Spraying from a hose or oil running down firewall, etc.	Ruptured hose (e.g., oil line, fuel line)
Status	**Operational**		DO NOT OPERATE		
Required Actions:	None	**RECORD** leak Type 1 and the source of the leak in Equipment Logbook.	[A] **TAG** equipment out of service (OOS) with an Equipment OOS Tag in accordance with WP-04-AD3016, Equipment Out of Service Process. [B] **SUBMIT** AR for repairs. [C] **RECORD** leak type and AR number in Equipment Logbook. [D] **WHEN** repairs and cleanup are completed, the equipment can be put back into service.		